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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,767

04/05/2007

Thorsten Krawinkel

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EXAMINER

LENIHAN, JEFFREY S

ART UNIT

PAPER NUMBER

1796

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,767	Applicant(s) KRAWINKEL, THORSTEN	
	Examiner Jeffrey Lenihan	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the amendment filed on 3/17/2010.
2. The objections and rejections not addressed below are deemed withdrawn.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/2010 has been entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

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had possession of the claimed invention. Independent claim 1 has been amended to exclude the inclusion of "acrylate-containing polymers." This limitation is inherited by all dependent claims. As discussed in the advisory action mailed on 3/10/2010, this limitation is not supported by the original disclosure.

Claim Rejections - 35 USC § 102/§ 103

7. Claims 1, 2, 5-7, and 9-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over St. Clair, US6653408.

8. Example 3 of St. Clair (Column 9, lines 10-30) discloses pressure sensitive adhesives (for claim 1) (see Table 5) comprising 30% by weight (for claims 4, 9) Kraton® FG 1924, a commercially available maleic anhydride-grafted styrene-ethylene/butylene-styrene (SEBS) block copolymer, corresponding to the claimed acid anhydride-modified vinylaromatic block copolymer (for claim 1) having styrene endblocks (for claim 2); aluminum acetylacetonate (for claims 6, 11), corresponding to the claimed metal chelate (for claim 1); and REGALREZ® 1085, corresponding to the claimed tackifier resin (for claim 1) (Column 5, line 67 to Column 6, line 2; Column 6, lines 15-17); and DRAKEOL® 34, a plasticizer (for claim 5) (Column 6, lines 31-41). St. Clair teaches the use of the adhesive composition for tape, corresponding to the claimed adhesive strip (for claims 1, 7). The compositions of Example 3 are not reported to contain acrylate-containing polymers (for claim 1). St. Clair further discloses similar compositions comprising 35.5% (for claim 10) by weight Kraton® FG 1924 (see Table 13).

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9. St. Clair is silent regarding the property of detachability with stretching in the direction of the bondline; however, this limitation is inherently met by the prior art. As discussed above, the prior art pressure sensitive adhesive comprises the same components combined in similar amounts as the claimed invention; the examiner therefore takes the position that the properties of the prior art article would necessarily be the same as claimed and inherently be not materially different from those of the claimed invention. Applicant is therefore required to provide factual evidence demonstrating an unobvious difference between the claimed invention and the prior art pressure sensitive adhesive.

Claim Rejections - 35 USC § 103

10. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groves, US5623010 (of record). Supporting evidence is disclosed in DuPont Technical Data Sheet, TYZOR Technical Bulletin K-17591 (of record).

11. The rejection stands as per the reasons outlined in the previous Office Actions, incorporated, incorporated herein by reference.

12. Regarding the amendments to independent claim 1: Groves discloses a polymer blend wherein polymer component (b) may be a copolymer comprising (i) a methacrylic acid ester and (ii) at least one monomer having a carboxylic acid functionality (abstract); Groves therefore renders obvious the use of a polymer component (b) that does not comprise an acrylate monomer, corresponding to the claimed composition that contains no acrylate-containing polymer (for claim 1). Groves further discloses that the polymer

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blend of US5623010 may be used in pressure sensitive adhesives (Column 2, lines 14-17; Column 4, lines 9-10).

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over St. Clair, US6653408, as applied to claim 1 above, and further in view of Christ et al, WO 02/26907.

14. St. Clair is silent regarding the inclusion of the additional claimed components.

15. Christ discloses a pressure sensitive adhesive comprising a poly(1-alkene) elastomer (for claim 3) and a multifunctional methacrylate component (abstract).

16. "It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art;" see *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Both St. Clair and Christ disclose compositions used as pressure sensitive adhesives. Barring a showing of factual evidence demonstrating unexpected results, it would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to modify the composition of St. Clair by combining it with the composition of Christ, resulting in the production of a pressure sensitive adhesive comprising an elastomer as an additional component (for claim 3).

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17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over St. Clair, US6653408, as applied to claim 1 above, and further in view of Korpman et al, US4024312.

18. St. Clair is silent regarding the claimed multilayer structure.

19. Korpman discloses an adhesive tape having a multilayer structure wherein a highly extensible backing film is coated on one side with a layer of a pressure sensitive adhesive, and on the other side with a layer of a release agent (for claim 8) (Column 4, lines 11-21). Korpman teaches that the multilayer structure results in an adhesive tape which is easily stretchable and may be easily removed from an application surface (abstract).

20. Both St. Clair and Korpman are directed towards the field of pressure sensitive adhesives and their use in adhesive tapes. Barring a showing of unexpected results, it therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tape disclosed by St. Clair to have the multilayer structure disclosed by Korpman, in order to obtain a final product which could be easily removed from surfaces.

Response to Arguments

21. The rejection of claims 1-11 over Groves in view of Graham is withdrawn in view of applicant's amendment to claim 1 excluding acrylate-containing polymers from the claimed invention.

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22. Applicant's arguments filed 3/17/2010 have been fully considered but they are not persuasive.

23. Regarding the rejection of claims under 112, 1st paragraph: The mere absence of a positive recitation is not basis for an exclusion; see *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The original disclosure only recites the use of acrylate-containing polyolefins as an optional element which may be included in the claimed composition (see specification page 7, lines 17-18); as acknowledged by applicant, the specification does not refer to all acrylate-containing polymers. Regarding the examples provided in the specification, the mere fact that the provided examples do not contain acrylate-containing polymers does not demonstrate that applicant was in possession of the concept of excluding all acrylate-containing polymers from the claimed adhesive at the time the invention was made.

24. Regarding the claimed pressure sensitive adhesive: Groves renders obvious a polymer blend comprising polymer components (a) and (b), wherein polymer component (a) is a maleic anhydride-grafted styrene-ethylene/butylene-styrene (SEBS) block copolymer (Column 2, lines 45-51), corresponding to the claimed acid- or acid anhydride-modified vinylaromatic block copolymer; and polymer component (b) is a methacrylate ester copolymer, corresponding to the claimed composition that does not comprise an acrylate-containing polymer. Said polymer blend may further comprise a tackifier resin (Column 4, lines 17-38) and a titanate acid ester additive such as TYZOR DC® (Column 5, lines 1-16; Column 10, lines 1-5), corresponding to the claimed metal chelate. Furthermore, Groves states (Column 2, lines 14-17)

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dynes/cm such as metal and glass). The blends are useful as primers (e.g., for paints and coatings), adhesives (e.g., for use as tie layers), pressure sensitive adhesives, inks, and paints.

Contrary to applicant's assertion, Groves explicitly envisions the use of the polymer blend of US5623010 in a pressure sensitive adhesive. It therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a pressure sensitive adhesive comprising the claimed chemical components in view of the teachings of Groves.

25. Regarding the cross-linking of the vinylaromatic block copolymer via the metal chelate: A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present; see *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). As disclosed in applicant's specification, cross-linking of the modified vinylaromatic block copolymer occurs due to the interaction of the metal chelate with the acid or acid anhydride group which is grafted onto the claimed vinylaromatic block copolymer (see specification, page 4, lines 19-21). Said modified vinyl aromatic block copolymer may be a maleic anhydride-grafted SEBS (see specification, example 1).

26. As discussed above, Groves renders obvious a pressure sensitive adhesive comprising a maleic anhydride-grafted SEBS and a titanate acid ester additive such as TYZOR DC®, which, as discussed above and in the previous Office Actions, correspond to the claimed modified vinylaromatic block copolymer and metal chelate, respectively. The prior art therefore teaches a pressure sensitive adhesive wherein an

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SEBS polymer grafted with the same functional groups as the claimed vinylaromatic block copolymer is combined with a metal chelate having the same functional groups as the claimed metal chelate. The reactivities of the maleic anhydride-grafted SEBS and the titanate acid ester additive towards one another in the prior art composition therefore would necessarily be the same as in the claimed invention and inherently be not materially different from those of the claimed invention; metal chelate cross-linking of the maleic anhydride-grafted SEBS therefore will inherently occur in the prior art composition. Applicant is therefore required to provide factual evidence demonstrating that the claimed limitation that the vinylaromatic block copolymer is cross-linked by the metal chelate is not inherently met by the prior art adhesive

27. Applicant argues that one of ordinary skill in the art would expect the metal chelate in the prior art composition to cross-link the (meth)acrylate polymer component (b) rather than the maleic anhydride-grafted SEBS. The discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer; see *Atlas Powder Co. v. Ireco Inc.*, 10 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function, or unknown property which is inherently present in the prior art does not necessarily make the claim patentable; see *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). It is therefore insufficient to argue that one of ordinary skill in the art would not have recognized that cross-linking of the maleic anhydride-grafted SEBS occurs in the prior art composition.

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28. It has been held that "a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments," *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.). "Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments," *In re Susi* 440 F.2d 442, 169 USPQ 423 (CCPA 1971). (MPEP § 2123 [R-5]). Groves' disclosure of an example of an adhesive that does not contain a metal chelate does not constitute a teaching away from the reference's disclosure that such additives may be included in the polymer blend of US5623010 (Column 5, lines 1-16; Column 10, lines 1-5). The examiner further notes that Example 24 of Groves discloses a blend comprising a metal chelate which is used to form an adhesive film on aluminum strips (Column 18, lines 19-38); contrary to applicant's allegation, Groves therefore does not exclude the addition of metal chelates from adhesive compositions comprising the blend of US5623010.

29. Arguments regarding the composition of the prior art adhesive as compared to the claimed invention are addressed in the previous paragraphs; applicant's arguments regarding the properties of detachment by stretching in the direction of the bondline are not persuasive per the reasons outlined in the previous Office Action, incorporated by reference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Lenihan whose telephone number is (571)270-

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5452. The examiner can normally be reached on Monday through Thursday from 7:30-5:00 PM, and on alternate Fridays from 7:30-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/
Primary Examiner, Art Unit 1796

/Jeffrey Lenihan/
Examiner, Art Unit 1796

/JL/